AD	1	

Award Number: DAMD17-00-1-0016

TITLE: Changing the Attitudes and Behaviors of Black Men

to Screening for Prostate Cancer

PRINCIPAL INVESTIGATOR: Maxwell Twum, Ph.D.

CONTRACTING ORGANIZATION: Fayetteville State University

Fayetteville, North Carolina 28301-4298

REPORT DATE: March 2003

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command

Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;

Distribution Unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.

## REPORT DOCUMENTATION PAGE

Form Approved OMB No. 074-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

1. AGENCY USE ONLY (Leave blank)

2. REPORT DATE
March 2003

3. REPORT TYPE AND DATES COVERED
Annual (1 Mar 02 - 28 Feb 03)

4. TITLE AND SUBTITLE

Changing the Attitudes and Behaviors of Black Men to Screening for Prostate Cancer

5. FUNDING NUMBERS
DAMD17-00-1-0016

6. AUTHOR(S)

Maxwell Twum, Ph.D.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Fayetteville State University
Fayetteville, North Carolina 28301-4298

8. PERFORMING ORGANIZATION REPORT NUMBER

E-Mail: mtwum@uncfsu.edu

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for Public Release; Distribution Unlimited

12b. DISTRIBUTION CODE

## 13. ABSTRACT (Maximum 200 Words)

The objectives of the project are a) to explore the prevailing attitudes toward screening for prostate cancer among Black men in the Cape Fear region of North Carolina b) to determine the comparative effectiveness of a one-time presentation of information advocating prostate cancer screening to that of repeated presentation of the message, and c) to determine the characteristics and impact of the agent of information delivery on the attitudes and behaviors of Black men toward screening for prostate cancer. The study involves the presentation of uniform messages advocating the benefits of prostate cancer screening to a group of 120 Black men 40 years and older who have never screened for prostate cancer, nor participated in a prostate cancer screening education program. Researchers, health professionals, and peer facilitators will deliver educational messages once to one group, and three times to a second group. The comparison of attitudes before exposure to the messages to that after exposure will help determine the impact of the program on attitudes in the groups. The number of men screened following exposure to the messages will determine the impact of the program on behavior change.

14. SUBJECT TERMS Prostate Cancer, Scree	te Cancer, Screening, Black Men, Attitudes, Behaviors 13			
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	
Unclassified	Unclassified	Unclassified	Unlimited	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89) Prescribed by ANSI Std. Z39-18 298-102

## **Table of Contents**

Cover	l
SF 298	ii
Table of Contents	lii
Introduction	1
Body	2
Key Research Accomplishments	6
Reportable Outcomes	7
Conclusions	8
References	9
Appendices	10

#### Introduction

This project has been designed on the premise that the attitudes of many Black men to screening for prostate cancer present enormous barriers to the control of the disease among Blacks. The objectives of the project are a) to explore the prevailing attitudes toward prostate cancer screening among Black men in the Cape Fear region of North Carolina b) to determine the comparative effectiveness of a one-time presentation of information advocating prostate cancer screening to that of repeated presentations of the message, and c) to determine the characteristics and impact of the agent of information delivery on the attitudes and behaviors of Black men toward screening for prostate cancer. The design of the study involves the presentation of uniform messages advocating the benefits of prostate cancer screening to a group of 120 black men 40 years and older who have never been screened for prostate cancer, nor participated in a prostate cancer education program. Participants are to be recruited from area black churches. Researchers, health professionals, and peer facilitators will deliver educational messages once to one group, and three times to a second group. The comparison of attitudes before exposure to the messages to that after exposure will help determine the impact of the program on attitudes in the groups. Furthermore, the number of men screened following exposure to messages will help determine the impact of the program on behavior change. It will also be possible to determine the relative effectiveness of the agent of the message and its interaction with the frequency of exposure on attitude and behavior change. Findings from this investigation will help researchers, health care professionals, and community leaders determine important variables that need to be considered in the design and delivery of educational programs geared toward changing the attitudes and behaviors of Black men to screening for prostate cancer.

## Body

The following are the timelines proposed for the Statement of Work:

### Month 1-3

The recruitment effort for this project was designed to cover the first three months of the project. The principal investigator (PI) was to contact and solicit support from Black churches, pastors and group leaders in these churches. Contacts the PI had already established with some area churches were expected to make a positive contribution toward obtaining support from the Black community.

Effort in the first 3 months was also to be geared toward the gathering, and preparation of educational materials to be used in the project. A final version of questionnaire to be used to obtain information about attitudes towards screening for prostate cancer among potential participants was to be developed.

## Month 4-6

The questionnaires was expected to be administered to all participants. Student research assistants were to be trained to administer the questionnaires in direct interviews. The interviews were to be performed either in the homes of participants or in churches. While the preliminary information on attitudes were being obtained, the peer leaders and nurses or other health professional in the different churches were to be identified and trained in how to present the materials, and manage the educational sessions in the respective churches.

#### Month 7-18

Discussions of educational materials were to be conducted in the different churches. While the educational programs were going on, initial data obtained on the attitudes questionnaires were to be coded and analyzed. Preliminary results were expected to be presented and published.

### Month 19-23

A second direct interview questionnaire was to be administered to all participants. The focus of the second interview is to determine whether participation in the educational activities had had any significant impact on the attitudes of participants towards screening for prostate cancer. It is also to determine whether as a result of the educational activities, the participants have followed through and obtained screening from their physicians.

Data from doctors is of particular interest at this stage.

## Month 24-30

The coding, analysis of the data, and the publication of findings is proposed. Possible problems that one may encounter may be that some individuals may not be persistent or

consistent in their attendance to these educational sessions. There could also be illness and other emergencies that may cause some individuals in the repeat presentation groups to drop out. Plans have been outlined in the proposal to deal with these problems (see Procedures for dealing with attrition relative to the post-test)

## Month 31-36

Month 31-36 is designed to be used for an intensive educational program in area churches. The results of the project will be presented to participants not included in the study through seminars and workshops. The data and results from the project will be made available to other interested researchers through publicity on the World Wide Web.

Since the official initiation of the project on October 20, 2001 a number of practical issues with the recruitment of eligible participants have made it necessary to drastically revise the timelines originally proposed. An important reason for the delays in the fulfilment of the timelines is the difficulty with the participant recruitment process. It takes several months to recruit and interview eligible participants, in addition to the setting up of educational sessions. It was expected that all the participants would have been interviewed by now, with the collection of follow-up data underway. Unfortunately, the recruitment of participants has been very challenging.

Recruitment efforts have used radio, television, and local papers to advertise the project. Recruitment of participants has been done through predominantly Black churches. We have used our contacts with pastors, deacons, and other church leaders to enlist participants from all known predominantly black churches in Cumberland county. The number of participants enlisted in the project through these avenues has been negligible, however. Although it was anticipated that a majority of the participants would be recruited from Cumberland county, the practical aspects of the project has shown otherwise. The most effective means through which participants have been recruited has been through mass mailing of letters to all Black men in Cumberland and adjoining counties.

Reaching the thousands of eligible Black men in towns and counties outside Cumberland county requires the sending of direct mail to potential participants. There is also a dire need for more research assistants to do many of the things that have to be done to reach more Black men. Research assistants are needed prepare letters for mass mailing, visit barbershops in town and rural communities and local factories that employ substantial numbers of eligible Black men. To this end, the principal investigator requested for permission to reallocate funds to facilitate the recruitment effort. Although the letter was sent in February 2003, no action has so far been taken by the program director on this request. Without the hiring of more research assistants to assist with the difficult task of recruiting participants, it will be impossible to obtain the numbers outlined in the proposal.

When eligible participants are identified our research assistants do direct interviews with the men about their attitudes to prostate cancer screening. These interviews have been conducted without any problems. Most interviews last about 25 minutes, whereas a few last a little longer. Many participants understand the questions and express their opinions without difficulty. Seventy participants have so far been interviewed for their initial attitudes about screening for prostate

cancer.

Educational sessions have been conducted for participants who have been interviewed. One session has been conducted by the principal investigator. A second session has been conducted by a physician member of a church, whereas a third educational session has been conducted by a prostate cancer survivor. An observation that was anticipated and expressed in the proposal is that some participants have not been able to attend the sessions. A second observation is that many who have attended these educational sessions have not screened for prostate cancer following the session. The table below summarizes the numbers of participants so far interviewed.

Group Educator	Number Interviewed*	Number Attending Educational Session	Number Screened
Researcher	20	12	3
Medical Personnel	20	15	2
Survivor	20	13	0

<sup>\* 10</sup> participants have been interviewed to form another group.

Data from the initial interviews continue to be entered into the database in preparation for analysis. It is envisaged that a preliminary manuscript of the data collected so far will be ready for submission to a journal by December, 2003. Plans are underway to collect follow-up data on the attitudes to screening for prostate cancer among participants who have already been educated about the need to screen for the disease. In sum, the project is making progress, albeit, at a slower pace than originally anticipated toward the fulfilment of the objectives. A major problem is the large amount of time and resources required to enlist participants.

There is the need for more personnel resources if the proposed number of participants is to be enlisted. According to the information from the USAMRMC to the Fayetteville State University office of sponsored research, a final report is due in March 2004. That deadline does not present enough time for all items outlined in the proposal to be completed. Although effort continues to be made to recruit more eligible participants, reaching the number proposed will require a further no-cost extension of the grant period. Considering that the project was officially begun in October 2001, the proposed deadline for the submission of a final report shortens the grant period (originally stated as 3 years) substantially by several months. An additional no-cost extension of the grant period will be needed to complete the project as proposed.

In view of the problems outlined in the foregoing about the recruitment and implementation of the project goals, the following revisions to the timelines are proposed:

#### Month 1-3

The PI contacts and solicits support from Black churches, pastors and group leaders in these churches. Contacts the PI has already established with some area churches are expected to make a positive contribution toward obtaining support from the Black community. Effort in the first 3 months is also to be geared toward the gathering, and preparation of educational materials

to be used in the project. A final version of the questionnaire to be used to obtain information about attitudes towards screening for prostate cancer among potential participants is developed. Peer leaders and nurses or other health professional in the different churches are identified and trained in how to present the materials, and manage the educational sessions in the respective churches.

#### Month 4-32

Student research assistants administer questionnaires to recruited participants. Groups of 20 men are formed as they are recruited for education sessions to be conducted by designated persons. Discussions of educational materials are to be conducted in the different churches. While the educational programs are going on, initial data obtained on the attitudes questionnaires are to be coded and analyzed. Preliminary results are expected to be presented and published. Follow-up interviews are to be conducted for men who have completed their interviews and educational sessions.

#### Month 33-36

The coding, analysis of the data, and the publication of findings is proposed. The results of the project will be presented to participants not included in the study through seminars and workshops. The data and results from the project will be made available to other interested researchers through publicity on the World Wide Web.

# Key Research Accomplishments

- 1. Seventy people have been interviewed for their initial attitudes about screening for prostate cancer.
- 2. Educational sessions advocating prostate cancer screening has been conducted for 40 participants who have not previously screened for prostate cancer.
- 3. Follow-up interviews are being collected.
- 4. Data are being entered for analysis.

# Reportable Outcome

# Conclusions

## References

# Appendices